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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,758	06/21/2006	Nicholas James Adams	TS5595US	4917
23632 7590 08/19/2008 SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463				
EXAMINER MCCAIG, BRIAN A				
ART UNIT		PAPER NUMBER		
4112				
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08/19/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/583,758

**Applicant(s)**

ADAMS ET AL.

**Examiner**

BRIAN MCCAIG

**Art Unit**

4112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)  
Paper No(s)/Mail Date June 21, 2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Summary*

1. This is the initial Office action based on the 10/583758 application filed June 21, 2006.
2. Claims 1-22 are pending and have been fully considered.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 11, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over BENARD ET AL (WO 02/099014 A2) in view of BRADFORD (WO 05/044954 A1) and WOMACK, JR ET AL (US 5866751), hereafter referred to as BENARD, BRADFORD, and WOMACK, respectively.**
5. BENARD discloses [see abstract; pg 4, lines 18-22; and pg 12, lines 4-9 & lines 33-35] a process to prepare a base oil starting from a slack wax, which contains other wax sources such as a Fischer-Tropsch derived wax, feedstock by contacting the feedstock in the presence of hydrogen with a catalyst under hydroisomerization conditions and performing a subsequent pour-point reducing step (solvent-dewaxing) to obtain the base oil, which is analogous to reducing the wax content of a Fischer-Tropsch wax followed by solvent dewaxing as required in Claim 1 of the instant

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application. BENARD does not appear to explicitly disclose transporting the intermediate product of the hydroisomerization from a remote location to a location closer to the end-user. However, BRADFORD discloses [pg 1 line 1 to pg 2, line 6 & pg 7, line 29 to pg 8, line 21] a process of transporting a hydrocarbon product from a remote location via a ship to a location to a location closer to the end users. At the time of the invention, it would have been obvious to one of ordinary skill in the art to add the transport process of BRADFORD to the base oil process of BENARD in order to reduce the high capital expenditures of other transporting processes such as pipelines or liquefying into a natural gas, which requires liquefaction and re-gasification plants each transport terminal as evidenced by WOMACK [Column 7, Lines 24-35] and taught by BRADFORD [pg 1, lines 11-14]. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

6. With regard to Claim 11, BRADFORD discloses [abstract & pg 7, line 32-pg 8, pg 8, line 24] that transporting is by means of a ship wherein the hydrocarbon product is loaded onto empty product containers in the ship that have been purged with nitrogen, wherein the nitrogen was obtained by separating oxygen from air with the oxygen being used in the Fischer-Tropsch process to create the hydrocarbon product.

7. With regard to Claim 12, since the body of the claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states the purpose or intended use of the invention rather than any distinct definition of any of the claimed invention's limitations, the preamble is not considered a limitation and is of no

significance to claim construction. *Pitney Bowes, Inc. v. Hewlett Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999).

8. **Claims 2-10 and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over BENARD ET AL (WO 02/099014 A2) in view of BRADFORD (WO 05/044954 A1) and WOMACK, JR ET AL (US 5866751) as applied to Claim 1 above, and further in view of MILLER (US 6699385 B2), hereafter referred to as BENARD, BRADFORD, WOMACK, and MILLER, respectively.**

9. With regard to Claims 2-4 and 13-15, the discussion of modified BENARD in paragraph 5 is incorporated herein by reference. Modified BENARD does not appear to explicitly disclose that the feed to the hydroisomerization has a 10 wt % recovery boiling point of above 500° C and a wax content greater than 50 wt %. However, MILLER discloses [see, e.g., the abstract & Column 4, Lines 25-35] a process for producing a base oil by providing a heavy waxy feed stream having an initial boiling point greater than 900° F (480° C) and more preferably 950° F (510° C) and a paraffin (wax) content of at least 80%. The initial boiling point implies that a 0 wt % recovery boiling point at temperatures less than possibly 510° C, or, conversely, that the 10 wt % recovery boiling point will be greater than possibly 510° C, as required in Claim 2 of the instant application. Furthermore, since the initial boiling point of MILLER is greater than 510° C, it is obvious that the initial boiling point may be 550° C, which satisfies the requirement of Claim 3 of the instant application. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the feed of BENARD to include the heavy wax of MILLER to obtain a plurality of fuel fractions as taught by

MILLER [Column 2, Line 5-Column 3, Line 5]. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

10. With regard to Claims 5-8 and 16-19, the discussion of modified BENARD in paragraph 5 and the discussion of the previous paragraph are incorporated herein by reference. Furthermore, MILLER discloses [Column 5, Line 22 to Column 6, Line 36] the same hydrotreating/hydroisomerization catalyst as BENARD [see, e.g., pg 7, lines 22-26 & pg 11, lines 30-31] and as disclosed in the Applicant's specification (i.e., a Group VIIIB metal such as nickel on a suitable refractory metal oxide carrier such as silica, alumina, or silica alumina). Furthermore, the reaction conditions (BENARD [pg 12, lines 4-26] and MILLER [Column 7, Lines 30-50]), and feeds are the same between the aforesaid references and the application. Since the feed and reaction conditions between the aforesaid references and the Applicant's specification are the same, it is obvious that the intermediate product would possess the same properties as required in Claims 5-8 of the instant application.

11. With regard to Claims 9-10 and 20-21, the discussion of paragraphs 5, 8, and 9 are incorporated herein by reference. In addition, BENARD discloses [see, e.g., pg 4, lines 7-10; pg 5, lines 23-30; pg 7 lines 22-26; & pg 10, lines 20-24] wherein the hydroisomerization catalyst is an amorphous and/or a molecular sieve-based catalyst comprising a silica-alumina carrier and a Group VIIIB metal, particularly, nickel.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN MCCAIG whose telephone number is (571)270-5548. The examiner can normally be reached on M-F 8-430.
13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barbara Gilliam can be reached on (571)272-1330. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BAM

/Barbara L. Gilliam/  
Supervisory Patent Examiner, Art Unit 4128